



EXPLANATION

- Kaolinized greisen or greisenized rhyolite dike rock**
Soft, gray, green to purple. Pseudoporphyrific texture caused by kaolinite patches. Some faces contain high percentage of pink mica and fluorite, unit generally contains sulfide minerals, cassiterite, and minor amounts of wolframite
- Clay derived from greisen or greisenized rhyolite dike rock**
Soft, white to tan. Iron sulfide minerals mostly leached, but unit locally contains arsenopyrite, ferrous sphalerite, cassiterite, fluorite, specks of limonite, and traces of wolframite
- Altered rhyolite**
Dike rock; lithology unknown because of lack of exposures
- Dike rock**
Soft white, completely altered to kaolinite, topaz, mica, fluorite. Original lithology unknown. Exposed only on 294 level from inclined shaft and 125 crosscut
- Amygdaloidal basalt dike rock**
Firm to hard, dark-brown, purple or green, highly altered. Contains relict plagioclase laths
- Granite**
Medium- to fine-grained, bone-white, contains quartz, plagioclase, orthoclase, and biotite, feldspars partly sericitized; cut along joints by thin veins containing fluorite, topaz, mica, sulfide minerals, cassiterite and some dark-green silicate
- Greisen or almost completely greisenized granite**
Medium- to coarse-grained, hard, gray to dark-gray. Consists of quartz and topaz with minor amount of mica, sulfide minerals locally constitute several percent of rock, fluorite sparse to abundant, unit contains minor amounts of cassiterite and wolframite
- Clay derived from limestone or tactile**
Very soft, greenish-gray. Commonly contains small amounts of cassiterite, fluorite, and sulfide minerals. Thin irregular dashes denote shearing
- Clay derived from limestone**
Soft to firm, white to yellowish-gray. Contains pods and vugs of coarsely crystalline carbonate and sparsely disseminated sulfide minerals, cassiterite, and fluorite
- Marmorized limestone**
Cut by many thin veins containing one or more of following: fluorite, sulfide minerals, silicate minerals, carbonate minerals, cassiterite, and wolframite. Large dots indicate noticeable coarsely crystalline carbonate minerals, T's indicate (diagrammatically) isolated pods of tactile
- Tactile**
Contains residuals of marmorized limestone and pods of coarsely crystalline carbonate (large dots), usually contains pyrite, minor amounts of other ore minerals and calcite
- Fault breccia and gouge**
Showing dip of fault
- Clay alteration**
Spacing of dots denotes relative degree
- Contact, showing dip**
Dashed where gradational or inferred, queried where projected long distances
- Fault, showing dip**
Dashed where inferred, D, downthrown side; U, upthrown side
- Plunge of small anticlinal drag fold**
- Strike and dip of beds**
- Strike and dip of joints**
- Carbonate vein of possible minable thickness**
Showing dip, contains cassiterite and coarsely crystalline wolframite
- Veinlet**
Showing dip, average thickness, and major constituents as determined megascopically; joint symbol indicates veinlet formed along joint, and strike of vertical veinlet
- Foot of two-compartment vertical shaft**
- Two-compartment inclined shaft going above and below level, showing inclination**
- Foot of raise**
- Mine workings**
- Timbered workings**
- Caved workings**
Mapped before caving
- Location of special sample**
Showing sample width in feet (below bar). Sn content in percent followed by WO₃ content in percent (above bar)
- Horizontal projection of diamond-drill hole of U. S. Tin Corp., drilled in 1955 under contract with Defense Minerals Exploration Administration**
- Location of vertical diamond-drill hole of U. S. Tin Corp., drilled in 1955 under contract with Defense Minerals Exploration Administration**
- Horizontal projection of diamond-drill hole of U. S. Bureau of Mines drilled from surface, 1943-44**
- Location and reference number of clay sample listed in text table**
- U. S. Tin Corp. survey coordinates**
- U. S. Tin Corp. survey spad with number, where known**
- NOTE: Altitudes of collars of U. S. Bureau of Mines drill holes are taken from plate 2, and are approximately only**

Base map modified slightly from transit survey map by U. S. Tin Corp. Geology by C. L. Sainsbury, J. R. Houston, A. E. Weissenborn and G. Donald Eberlein, 1953-55

GEOLOGIC MAP OF 365, 294, AND 398 LEVELS, LOST RIVER MINE, ALASKA

